LIANG WANG

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↑ Homepage ♥ Google Scholar ♠ GitHub 知乎 Zhihu

Education

Institution of Automation, Chinese Academy of Sciences

Beijing, China

Ph.D. in Pattern Recognition and Intelligent Systems (selected for the PhD honors program)

2021 - 2026 (Expected)

- Center for Research on Intelligent Perception and Computing (CRIPAC)
- Advisors: Prof. Liang Wang, Qiang Liu, and Shu Wu
- Research Interests: AI for Science, Graph Representation Learning, Data Mining

Tongji University

Shanghai, China

B.Eng. in Software Engineering

2017 - 2021

- GPA: 4.86/5.00 (Ranking 3/214, Top 1.4%)
- Honors and Awards: National Scholarship (Top 1%), Outstanding Graduate of Shanghai (Top 5%)

Selected Publications

Rethinking Graph Masked Autoencoders through Alignment and Uniformity

- Liang Wang*, Xiang Tao*, Qiang Liu, Shu Wu, Liang Wang
- AAAI 2024

DIVE: Subgraph Disagreement for Graph Out-of-Distribution Generalization

- Xin Sun, Liang Wang, Qiang Liu, Shu Wu, Zilei Wang, Liang Wang
- KDD 2024

GSLB: The Graph Structure Learning Benchmark

- Zhixun Li, Liang Wang, Xin Sun, Yifan Luo, Yanqiao Zhu, Dingshuo Chen, Yingtao Luo, Xiangxin Zhou, Qiang Liu, Shu Wu, Liang Wang, Jeffrey Xu Yu
- NeurIPS 2023

Bi-Level Graph Structure Learning for Next POI Recommendation

- Liang Wang, Shu Wu, Qiang Liu, Yanqiao Zhu, Xiang Tao, Mengdi Zhang, Liang Wang
- IEEE Transactions on Knowledge and Data Engineering

Semantic Evolvement Enhanced Graph Autoencoder for Rumor Detection

- Xiang Tao, Liang Wang, Qiang Liu, Shu Wu, Liang Wang
- WWW 2024

CAMLO: Cross-Attentive Multi-View Network for Long-Term Origin-Destination Flow Prediction

- Liang Wang, Hao Fu, Shu Wu, Qiang Liu, Xuelei Tan, Fangsheng Huang, Mengdi Zhang, Wei Wu
- SDM 2024

Enhancing Temporal Knowledge Graph Forecasting with Large Language Models via Chain-of-History Reasoning

- Yuwei Xia, Ding Wang, Qiang Liu, Liang Wang, Shu Wu, Xiaoyu Zhang
- ACL 2024 (Findings)

Personalized Interest Sustainability Modeling for Sequential POI Recommendation

- Zewen Long*, Liang Wang*, Qiang Liu, Shu Wu
- CIKM 2023 (Short Paper)

Selected Projects

PyGCL: A PyTorch Library for Graph Contrastive Learning

https://github.com/PyGCL/PyGCL

- 🏠 Github Star: 853
- An easy-to-use library for graph contrastive learning with PyTorch. It implements a wide variety of contrastive objectives, data augmentations, contrasting modes and other utilities useful for implementing and evaluating contrastive learning on graphs.

GSLB: A Benchmark of Graph Structure Learning

https://github.com/GSL-Benchmark/GSLB

- ☆ Github Star: 96
- An open-source library built for easy implementation and evaluation of graph structure learning model family. It offers a versatile control of graph dataset laoding, structure learners, structure processors, and a bunch of reproduced models.

Internship

Graph Learning Group, NLP Center, Meituan Inc.

Beijing, China

Research Intern

Sept. 2021 - Oct. 2022

• Conducted research on graph self-supervised learning and graph-based spatial-temporal data mining. The research results have been published in IEEE TKDE and SDM 2024.

CRIPAC, Institution of Automation, Chinese Academy of Sciences

Beijing, China

Research Intern

Feb. 2021 - Jun. 2021

• Conducted research on dynamic graph structure learning for multivariate time series forecasting.

Advertising Department, ByteDance Inc.

Shanghai, China

Machine Learning Engineer Intern

Jul. 2020 - Dec. 2020

• Supported the improvement of advertising machine learning models, and the development of the advertising system.

Talks

Denoising-based 3D Molecular Pre-training, 2024, Slides

Generative Graph Self-Supervised Learning, 2023, Slides

Graph Transformers, 2022, Slides

Graph Self-Supervised Learning and Pre-Training, 2021, Slides

Academic Services

Conference Reviewers: KDD 2024, NeurIPS 2024

Technical Skills

Programming Languages: Python, C++, Matlab, Java, C#

Machine Learning Frameworks: PyTorch, PyTorch Geometric (PyG), Deep Graph Library (DGL)

Others: LATEX, Git